



*Bringing back the birds*

The Honorable Michal Freedhoff, Ph.D.  
Assistant Administrator  
Office of Chemical Safety and Pollution Prevention  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

Edward Messina  
Director  
Office of Pesticide Programs  
Environmental Protection Agency  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

CC: Jake Li, Deputy Assistant Administrator for Pesticide Programs

September 29, 2022

**Subject:** American Bird Conservancy Response to Pesticide-Coated Seed decision.

Dear Assistant Administrator Freedhoff and Director Messina:

American Bird Conservancy (ABC), which works to conserve birds throughout the Americas, respectfully thanks the Environmental Protection Agency for its response to our 2017 Petition: EPA-HQ-OPP-2018-0805. Though we are disappointed with the denial of our request to remove pesticide-coated seeds from exemption, we appreciate the Agency announcing its intention to better understand the breadth of use of pesticide-coated seeds in the United States.

Pesticide-coated seeds have been subject to the Treated Article Exemption (TAE) under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) since 1988. Seed coatings are the main use of neonicotinoid insecticides. Their inclusion under the TAE means it is unknown exactly how many pounds of neonicotinoids are applied as seed treatments each year.

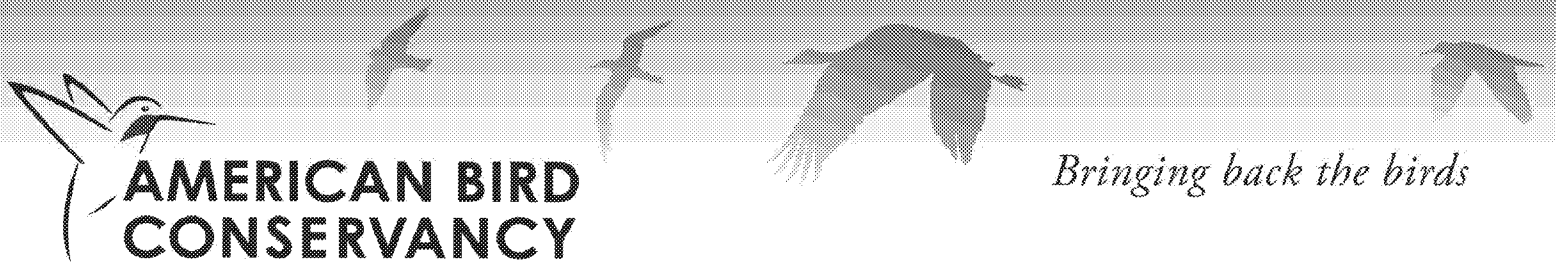
The United States Geological Survey stopped tracking and reporting pesticides used as seed coatings in 2015 citing “complexity and uncertainty” as barriers to estimating pesticide use.<sup>1</sup> As such, there is no accurate estimation of how much chemical is used as seed treatments, including the neonicotinoids imidacloprid, thiamethoxam, and clothianidin. This lack of data inhibits adequate mitigation against pesticide impacts on endangered species and ecosystems.

The petition response states that EPA’s “assessment of [pesticides used as coatings] is thorough and that such concerns and can are being addressed in the context of registration and registration review actions.”<sup>2</sup> However, existing assessments have identified many chemicals used as seed treatments as Likely to Adversely Affect

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<sup>1</sup>[https://water.usgs.gov/nawqa/pnsp/usage/maps/show\\_map.php?year=2015&map=IMIDACLOPRID&hilo=L&disp=Imidacloprid](https://water.usgs.gov/nawqa/pnsp/usage/maps/show_map.php?year=2015&map=IMIDACLOPRID&hilo=L&disp=Imidacloprid)

<sup>2</sup> <https://www.regulations.gov/document/EPA-HQ-OPP-2018-0805-0104>



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federally listed species and critical habitats.<sup>3</sup> Though mitigations may be introduced to account for these impacts, the scale and location where they need to be implemented are not presently understood. It is not possible to fully protect listed species and critical habitats with the current classification of pesticide-coated seeds.

The formulas used to evaluate the risk posed to birds from treated seeds are based on experiments conducted in the 1980s, years before the first neonicotinoid, imidacloprid, was registered as an insecticide.<sup>4</sup> It does not take into effect the tendency of birds to feed on multiple fields in the same day, effects on migratory ability, sublethal effects experienced by birds, potential kills off-site due to sublethal effects, or cumulative effects from treated seed contamination such as insect die off. Until these are adequately considered during registration and registration review, pesticide-coated seeds should *at least* be subjected to the same rigors as other chemical applications.

The TAE applies to articles treated with a pesticide with the intention of protecting the article itself (40 C.F.R. § 152.25(a)). Until this published response, there has been no indication that a plant resulting from the coated seed also counts as a treated article. Because resultant plants are now considered to be treated articles as well, and counted as part of the “mixture of substances<sup>5</sup>” treated with pesticide, there could be far reaching implications including challenges to pesticide tolerances.

ABC is pleased to see greater scrutiny placed on treated seed bag tag labels but do not feel this is adequate action to quantify and understand the use of pesticides on coated seeds. Better labeling is a step forward but also relies on the reading and implementation of all label requirements. However, field studies on growers using treated seeds indicate that the directions for use are not followed in full. For instance, treated seeds come with a label warning to cover spilled seeds or clean them up, yet in fields where this occurred there was no evidence of seed-spill clean-up, burial, or notice.<sup>6</sup>

Other applications of pesticides such as sprays, soil drenches, and aerial applications are more easily tracked due to the requirements under FIFRA. During registration or registration review, pesticidal effects can be mitigated through alteration of these application methods and quantified via reporting requirements by applicators. Treated seeds are not subject to these rules and, due to their continued exemption as announced today, will continue to enjoy this special status.

The tendency of neonicotinoid pesticide coatings to leave seeds and contaminate the environment is well documented, with as much as 97% of a chemical leaving the seed.<sup>7</sup> From there it kills nontarget insects,<sup>8</sup> can persist in soil for up to 1,000 days,<sup>9</sup> and ripples up and down trophic levels by disrupting ecosystems and

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<sup>3</sup> <https://www.epa.gov/pollinator-protection/schedule-review-neonicotinoid-pesticides>

<sup>4</sup> <https://www.epa.gov/sites/default/files/2016-04/documents/interimseedtreatmentguidance2016.pdf>

<sup>5</sup> Final for Signature\_Treated Seed Petition Response\_9-27.docx, page 36.

<sup>6</sup> Roy, C. et al. (2019). Multi-scale availability of neonicotinoid-treated seed for wildlife in an agricultural landscape during spring planting. *Science of the Total Environment*. doi: 10.1016/j.scitotenv.2019.05.010.

<sup>7</sup> <https://pubmed.ncbi.nlm.nih.gov/25793443/>

<sup>8</sup> [https://pubs.acs.org/doi/10.1021/acs.est.7b06388#:~:text=In%20recent%20years%2C%20neonicotinoid%20insecticides,\(nAChRs\)%2C%20their%20mol.](https://pubs.acs.org/doi/10.1021/acs.est.7b06388#:~:text=In%20recent%20years%2C%20neonicotinoid%20insecticides,(nAChRs)%2C%20their%20mol.)

<sup>9</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4284396/>



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natural processes.<sup>10</sup> Pesticide coated seeds have been shown to interrupt a bird's migratory ability, causing immobility and decreasing body weight.<sup>11</sup>

These serious complications are already difficult to protect against due to the relative opacity of neonicotinoid seed treatment usage. Though EPA has announced its intentions to further investigate cases of pesticide treatment or coated seed misuse or improper application/disposal, this will not mitigate against the effects of using the seeds in the first place. Coated seeds are destined to retain their high level of use (on as much as 95% of corn and 50% of soybeans grown in the United States) with limited knowledge on where and in what quantity they are applied.

ABC does not feel that the transitional difficulties detailed on page 46 associated with reclassifying coated seeds warrant inaction.<sup>12</sup>

ABC is grateful for EPA's intention to:

- Determine whether or to what extent pesticide-treated seed is being distributed, sold, or used in a manner inconsistent with treating pesticide labeling
- Pursue enforcement of pesticide or pesticide-treated seed label violations
- Promulgate an advance notice of public rulemaking seeking comment on issues raised in the petition

ABC is concerned with the declaration of EPA's potential issuance of "a FIFRA section 3(a) rule to regulate pesticide-treated seed under FIFRA section 3(a) to ensure distribution, sale, and use of the treated seed is consistent with treating pesticide and treated seed labeling." ABC would like EPA to change this from a possible exploration to a definite commitment to issue such a rule. The success of such a rule would also be contingent upon stronger language on coated seed bag tags.

ABC also strongly urges EPA to reconsider its petition response and reclassify pesticide-coated seeds so they are not included under the TAE when the resultant plant is the intended beneficiary of pesticides.

Thank you for the opportunity to review and respond to this action.

Sincerely,

E. Hardy Kern III  
Director of Government Relations,  
Pesticides and Birds Campaign  
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<sup>10</sup> <https://www.nature.com/articles/nature13531>

<sup>11</sup> <https://www.science.org/doi/10.1126/science.aaw9419>

<sup>12</sup> (1) a significant transition cost to farmers, during which availability of treated seed will be limited; (2) reduced flexibility to farmers to treat seed on the farm to tailor treatments to specific needs; (3) termination of tank mixing at commercial seed treatment facilities, which would eliminate the flexibility of tank mixing according to farmers' requests; and (4) increased costs to seed producers.